

A night-time photograph of a large industrial facility, likely a petrochemical plant. The scene is dominated by tall, illuminated distillation columns and a complex network of pipes and structural steel. In the foreground and middle ground, several large, spherical storage tanks are visible, some with labels like 'L.P.G. AT-804A' and 'BOST-TANK'. The entire facility is brightly lit with artificial lights, creating a high-contrast scene against the dark blue night sky. The lighting produces a starburst effect in several areas.

INVESTOR RELATIONS 2017 2Q

beyond
the best

KUMHO PETROCHEMICAL

Investor Relations 2017

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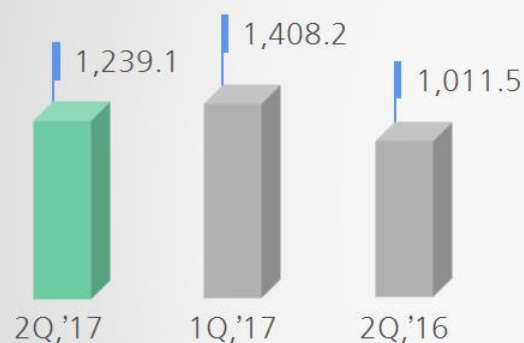
2Q, 2017 Overview

Sales & Operating Income

- ❖ Sales decreased by 12.0% since the last quarter and rose by 22.5% over the previous year to KRW 1,239.1bn.
- ❖ Operating income decreased by 32.9% since the last quarter and by 32.6% over the previous year to KRW 44.1bn.

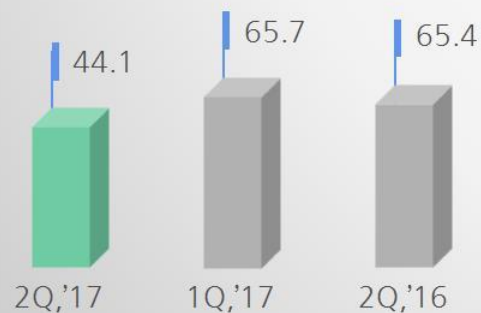
Sales

(Unit: KRW bn)



Operating Income

(Unit: KRW bn)



(Unit: KRW bn)

| | 2Q,'17 | 1Q,'17 | 2Q,'16 | Rate of change | |
|---|---------|---------|---------|----------------|--------|
| | | | | QoQ | YoY |
| S a l e s | 1,239.1 | 1,408.2 | 1,011.5 | -12.0% | 22.5% |
| [Synthetic Rubbers] | 499.5 | 636.2 | 387.7 | -21.5% | 28.8% |
| [Synthetic Resins] | 293.8 | 303.5 | 271.6 | -3.2% | 8.2% |
| [O t h e r s] | 445.8 | 468.5 | 352.2 | -4.8% | 26.6% |
| P h e n o l Derivatives | 295.5 | 309.2 | 223.4 | -4.4% | 32.3% |
| S p e c i a l t y Chemicals | 35.5 | 33.6 | 28.5 | 5.7% | 24.6% |
| E n e r g y | 37.4 | 47.8 | 38.1 | -21.8% | -1.8% |
| O t h e r s | 77.4 | 77.9 | 62.2 | -0.6% | 24.4% |
| Operating Income | 44.1 | 65.7 | 65.4 | -32.9% | -32.6% |
| [%] | 3.6% | 4.7% | 6.5% | -1.1%p | -2.9%p |
| Income before Income Taxes | 52.8 | 88.4 | 66.0 | -40.3% | -20.0% |
| N e t I n c o m e | 36.7 | 69.0 | 45.0 | -46.8% | -18.4% |
| Gain/Loss on Valuation of Equity Method Investments | 21.4 | 18.4 | 8.1 | 16.3% | 164.2% |

✓ Net Income is based on Controlling Interests.

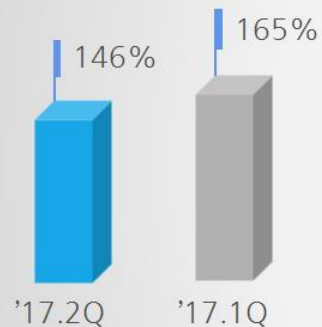
2Q, 2017 Overview

Financial Structure

- ❖ Stable financial structure maintained in accordance with a decrease in debt to equity ratio and continuous liquidity management.
- ❖ Total asset turnover ratio and interest coverage ratio decreased due to stagnant performance in major businesses.

(Unit: KRW bn)

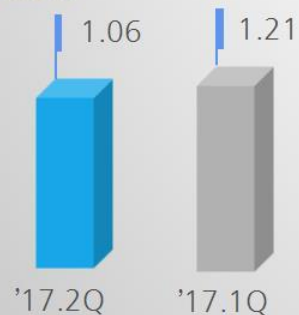
Debt to Equity Ratio (%)



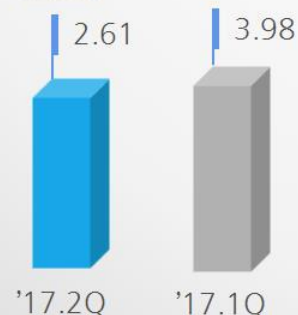
Borrowings (KRW bn)



Total Assets Turnover Ratio



Interest Coverage Ratio



| | Unit | 2Q,'17 | 1Q,'17 | 2Q,'16 | Rate of change | |
|------------------------------|--------|---------|---------|---------|----------------|--------|
| | | | | | QoQ | YoY |
| Assets | KRW bn | 4,617.8 | 4,760.7 | 4,476.2 | -3.0% | 3.2% |
| Liabilities | KRW bn | 2,743.3 | 2,961.3 | 2,754.9 | -7.4% | -0.4% |
| Shareholders' Equity | KRW bn | 1,874.5 | 1,799.4 | 1,721.3 | 4.2% | 8.9% |
| Controlling Interests | | 1,764.0 | 1,689.8 | 1,607.5 | 4.4% | 9.7% |
| Non-controlling Interests | | 110.5 | 109.6 | 113.8 | 0.8% | -2.9% |
| Debt to Equity Ratio | % | 146 | 165 | 160 | -19%p | -14%p |
| Borrowings | KRW bn | 2,133.3 | 2,177.1 | 2,072.8 | -2.0% | 2.9% |
| Won-denominated | | 1,623.5 | 1,566.9 | 1,642.4 | 3.6% | -1.2% |
| Foreign currency-denominated | | 509.8 | 610.2 | 430.4 | -16.5% | 18.4% |
| Total Assets Turnover Ratio | | 1.06 | 1.21 | 0.92 | -12.4% | 15.2% |
| Interest Coverage Ratio | | 2.61 | 3.98 | 4.25 | -34.4% | -38.6% |

Business Review

Synthetic Rubbers

40.3%
of Total sales

Synthetic
Rubbers

Synthetic
Resins

Others



- ❖ Sales declined by 21.5% over the previous quarter to KRW 499.5bn.
- ❖ Diminished sales and profitability due to a drop in the selling price and weak demand, caused by a downward trend of BD price.

• Sharp drop in BD price

- Stable supply caused by sufficient BD inventory and the stable operating rate of naphtha crackers due to a favorable upstream market condition, in spite of annual maintenances within the region.
- A continuous downward price of BD after a sharp decrease resulted from the adjustment of utilization rates of downstream makers.

➤ BD Price changes by region

(Unit: USD/ton)

| | Jan.'17 | Feb.'17 | Mar.'17 | Apr.'17 | May.'17 | Jun.'17 |
|------------|---------|---------|---------|---------|---------|---------|
| Asia | 2,935 | 3,030 | 2,170 | 1,325 | 1,113 | 947 |
| N. America | 1,885 | 2,651 | 2,529 | 1,934 | 1,375 | 1,133 |
| Europe | 1,931 | 2,325 | 2,126 | 1,686 | 1,450 | 976 |

※ Source: ICIS/PLATTS 2017

• Diminished profitability of synthetic rubber

- Decline in sales and profitability resulted from a drop in the selling price and weak demand due to a downward trend of BD price.
- Decrease in sales volume due to the ample inventory of synthetic rubbers, natural rubbers and tires within the area.

(Unit: USD/ton)

| | Jan.'17 | Feb.'17 | Mar.'17 | Apr.'17 | May.'17 | Jun.'17 |
|-----|---------|---------|---------|---------|---------|---------|
| SBR | 2,394 | 2,697 | 2,501 | 2,016 | 1,734 | 1,418 |
| BR | 2,756 | 3,238 | 2,960 | 2,244 | 1,963 | 1,550 |

※ Source: ICIS 2017

Business Review

Synthetic Resins

23.7%
of Total sales

Synthetic
Rubbers

Synthetic
Resins

Others

- ❖ Sales decreased by 3.2% over the previous quarter to KRW 293.8bn.
- ❖ Slight improvement in profitability resulted from robust demand mainly in ABS market, in spite of the weak price of raw materials (SM/BD).

• Weak SM price

- In times of high SM inventory at the beginning of quarter, weak SM price resulted from an increase in supply due to re-initiation from scheduled shutdowns and troubles outside the area.
- Slight rally in SM price resulted from the recovery of some demand in downstream and the occurrence of few additional troubles at the end of quarter.

➤ SM Price changes

(Unit: USD/ton, CFR China)

| | Jan.'17 | Feb.'17 | Mar.'17 | Apr.'17 | May.'17 | Jun.'17 |
|----|---------|---------|---------|---------|---------|---------|
| SM | 1,326 | 1,478 | 1,261 | 1,151 | 1,081 | 1,126 |

※ Source: ICIS 2017

• Slight improvement in profitability of synthetic resins

- Slight improvement in profitability and increase in sales volume, resulted from robust demand mainly in ABS market at the end of quarter, in spite of a drop in the selling price caused from weak price of raw materials (SM/BD).

(Unit: USD/ton)

| | Jan.'17 | Feb.'17 | Mar.'17 | Apr.'17 | May.'17 | Jun.'17 |
|-----|---------|---------|---------|---------|---------|---------|
| PS | 1,374 | 1,500 | 1,385 | 1,293 | 1,215 | 1,242 |
| ABS | 1,810 | 1,958 | 1,828 | 1,703 | 1,610 | 1,709 |

※ Source: PLATTS 2017

Business Review

Others

36.0%

Of Total sales

Synthetic
Rubbers

Synthetic
Resins

Others

- ❖ Sales decreased by 4.8% over the previous quarter to KRW 445.8bn.
- ❖ Phenol derivatives : Diminished sales and profitability caused by the weak price of raw materials and the downturn in demand.
- ❖ Energy : Decline in sales and profitability resulted from a drop in the electricity price and reduced demand.

• Phenol derivatives

- Weak Benzene (BZ) price in response to the downward oil price.
- Decrease in sales and profitability due to a downward selling price caused by the weak BZ price and decline in demand.

➤ BZ Price changes

(Unit: USD/ton, FOB Korea)

| | Jan.'17 | Feb.'17 | Mar.'17 | Apr.'17 | May.'17 | Jun.'17 |
|----|---------|---------|---------|---------|---------|---------|
| BZ | 931 | 1,010 | 835 | 808 | 750 | 748 |

※ Source: PLATTS 2017

• Energy

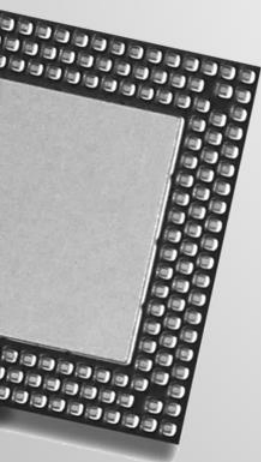
- Depreciation in sales and profitability caused by a drop in the electricity price (SMP), annual shutdown and a seasonal reduction in demand.

➤ SMP Price changes

(Unit: KRW/KW)

| | Jan.'17 | Feb.'17 | Mar.'17 | Apr.'17 | May.'17 | Jun.'17 |
|-----|---------|---------|---------|---------|---------|---------|
| SMP | 86 | 91 | 92 | 75 | 78 | 82 |

※ Source: Korea Power Exchange



3Q, 2017 Outlook

BD

- In addition to the low usage of LPG cracking, supply is anticipated to be stable without concerns with scheduled shutdowns.
- The potential increase in BD price looks to be limited due to an arbitrage; and the price is likely to be volatile depending on downstream demand.

Synthetic
Rubbers

- Limit is expected to the increase in SR price as a result of the low possibility for the increase in BD price and a sufficient supply of NR.
- Unstable demand is expected due to an ample tire inventory within the region and a recent increase in the price volatility of the main raw material (BD).

SM

- Tight balance between supply and demand is expected in the short-term due to troubles within the region, despite the low inventory and the start-over from SM annual maintenances.
- In spite of possible arbitrages, price is anticipated to be stable in accordance with the peak season for the manufacturing industry and robust demand.

Synthetic
Resins

- Demand looks to be robust due to some increase in restocking demand in the ABS/PS market.
- Volatility in the price is expected to stabilize with the anticipation in the stable price of feedstocks.

Appendices

Income Statement

(Unit: KRW bn)

| | 2Q,'17 | 1Q,'17 | 2Q,'16 | Rate of change | | | |
|---|-------------|-------------|-------------|----------------|----------------|---------------|----------------|
| | | | | QoQ | | YoY | |
| | | | | Amount | Rate of change | Amount | Rate of change |
| Sales | 1,239.1 | 1,408.2 | 1,011.5 | -169.1 | -12.0% | 227.6 | 22.5% |
| Operating Income | 44.1 | 65.7 | 65.4 | -21.6 | -32.9% | -21.3 | -32.6% |
| <i>(Operating Margin)</i> | <i>3.6%</i> | <i>4.7%</i> | <i>6.5%</i> | <i>-1.1%p</i> | - | <i>-2.9%p</i> | - |
| Net Interest Expense | 22.2 | -11.1 | 17.3 | 33.3 | - | 4.9 | 28.3% |
| Gain/Loss on Valuation of Equity Method Investments | 21.4 | 18.4 | 8.1 | 3.0 | 16.3% | 13.3 | 164.2% |
| Income before Income Taxes | 52.8 | 88.4 | 66.0 | -35.6 | -40.3% | -13.2 | -20.0% |
| <i>(Ordinary Income Margin)</i> | <i>4.3%</i> | <i>6.3%</i> | <i>6.5%</i> | <i>-2.0%p</i> | - | <i>-2.2%p</i> | - |
| Net Income | 36.7 | 69.0 | 45.0 | -32.3 | -46.8% | -8.3 | -18.4% |
| <i>(Net Income Margin)</i> | <i>3.0%</i> | <i>4.9%</i> | <i>4.4%</i> | <i>-1.9%p</i> | - | <i>-1.4%p</i> | - |

✓ Net Income is based on Controlling Interests.

Appendices

Balance Sheet

(Unit: KRW bn)

| | 2Q,'17 | 1Q,'17 | 2Q,'16 | Rate of change | |
|--------------------------------------|---------|---------|---------|----------------|---------|
| | | | | QoQ | YoY |
| Current Assets | 1,307.6 | 1,479.2 | 1,092.3 | -171.6 | 215.3 |
| - Cash and Cash Equivalents | 241.3 | 118.0 | 103.0 | 123.3 | 138.3 |
| Non-current Assets | 3,310.2 | 3,281.5 | 3,383.9 | 28.7 | -73.7 |
| Total Assets | 4,617.8 | 4,760.7 | 4,476.2 | -142.9 | 141.6 |
| Current Liabilities | 1,975.1 | 2,214.4 | 1,755.8 | -239.3 | 219.3 |
| Non-current Liabilities | 768.2 | 746.9 | 999.1 | 21.3 | -230.9 |
| ■ Interest bearing Liabilities | 2,133.3 | 2,177.1 | 2,072.8 | -43.8 | 60.5 |
| - Short-term Debts | 1,498.7 | 1,554.0 | 1,210.5 | -55.3 | 288.2 |
| - Long-term Debts | 634.6 | 623.1 | 862.3 | 11.5 | -227.7 |
| ■ Non-interest bearing Liabilities | 610.0 | 784.2 | 682.1 | -174.2 | -72.1 |
| Total Liabilities | 2,743.3 | 2,961.3 | 2,754.9 | -218.0 | -11.6 |
| Common & Preferred Stock | 167.5 | 167.5 | 167.5 | - | - |
| Total Shareholders' Equity | 1,874.5 | 1,799.4 | 1,721.3 | 75.1 | 153.2 |
| Net Debt Ratio | 41.0% | 43.3% | 44.0% | -2.3%p | -3.0%p |
| Long-term Debts to Total Debts Ratio | 29.7% | 28.6% | 41.6% | 1.1%p | -11.9%p |
| Current Ratio | 66.2% | 66.8% | 62.2% | -0.6%p | 4.0%p |
| Debt to Equity Ratio | 146.3% | 164.6% | 160.0% | -18.3%p | -13.7%p |

Appendices

Production Capacity (KKPC)

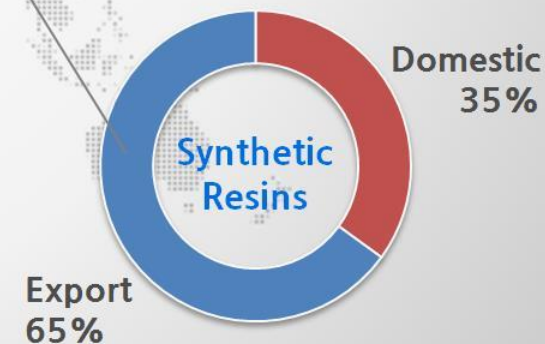
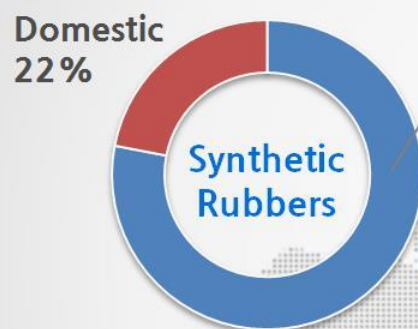
| | Product | | Capa. | Unit | Note |
|---------------------|--------------|-----|-----------|------|---|
| Synthetic Rubbers | BR | SBR | 360,000 | MT/Y | |
| | | HBR | 290,000 | | |
| | | LBR | 45,000 | | |
| | S-SBR | | 63,000 | | |
| | NdBR | | 60,000 | | |
| | NBR | | 80,000 | | |
| | HSR | | 10,000 | | |
| | NB Latex | | 400,000 | | Completion of Expansion: 200,000MT/Y(Multi-purpose), 2H,'16 |
| | SB Latex | | 81,800 | | |
| | SBS | | 75,000 | | |
| | Total | | 1,464,800 | | |
| Synthetic Resins | PS | | 230,000 | MT/Y | |
| | ABS | | 250,000 | | |
| | SAN/POW | | 145,000 | | |
| | EPS | | 80,000 | | |
| | PPG | | 141,000 | | |
| | Total | | 846,000 | | |
| Specialty Chemicals | Antioxidants | | 83,500 | MT/Y | |
| Energy | Steam | | 1,710 | T/H | |
| | Electricity | | 300 | MWH | |
| BD | Ulsan | | 90,000 | MT/Y | |
| | Yeosu | | 147,000 | | |
| | Total | | 237,000 | | |

Appendices

| Production Capacity (Affiliates) | | Product | Capa. | Unit | Note |
|----------------------------------|--|-------------|-----------|------|--|
| Kumho P&B Chemicals | | Phenol | 680,000 | MT/Y | |
| | | Acetone | 420,000 | | |
| | | MIBK | 60,000 | | |
| | | Cumene | 900,000 | | |
| | | BPA | 450,000 | | |
| | | Epoxy Resin | 135,000 | | Completion of Expansion: 17,000MT/Y, 2H,'17 |
| | | Total | 2,645,000 | | |
| Kumho Mitsui Chemicals | | MDI | 250,000 | MT/Y | Completion of Expansion: 100,000MT/Y, 2H,'17 |
| | | Aniline | 2,000 | | |
| | | Total | 252,000 | | |
| Kumho Polychem | | EP(D)M | 220,000 | MT/Y | |
| | | TPV/KEPA | 7,000 | | Completion of Expansion: TPV 5,000MT/Y, 4Q,'17 |
| | | Total | 227,000 | | |

Appendices

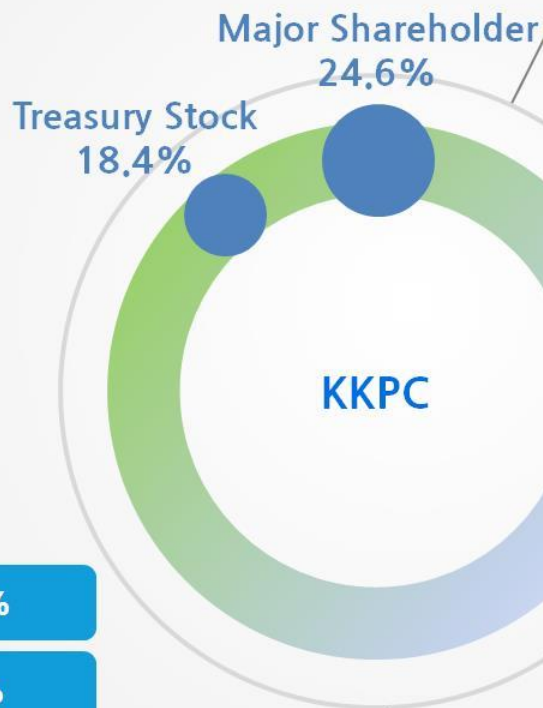
Sales Breakdown & Export Share by Region



Appendices

Investment Shares & Asset available for sale

✓ As of 30th June 2017,
based on common shares



Investments in Affiliates

| | |
|----------------------------|-------|
| Kumho P&B Chemicals | 78.2% |
| Kumho Mitsui Chemicals | 50.0% |
| Kumho Polychem | 50.0% |
| Kumho Terminal & Logistics | 95.0% |
| Korea Energy Power Plant | 96.1% |

Asiana Airlines 12.0%

Daewoo E&C 3.4%

KDB Life Insurance 0.9%

Asset available for sale

Q & A